

III. *The apparent Times of such of the Immersions and Emersions of Jupiter's Satellites, as are visible at London, in the Year 1736. together with their Configurations at those Times represented in a Plate (vide TAB.) by the same.*



























D. H. M.					D. H. M.			
JANUARY.					JUNE.			
4 0 6					19 7 1 46 M	E.	3	
FEBRUARY.					20 10 10 52 A	I.	4	
1 5 6 43 M	I.	2	21 11 3 38 M	E.	4			
2 13 6 4 M	I.	3	22 13 11 34 A	I.	1			
3 25 6 0 M	I.	1	23 14 2 8 M	I.	3			
MARCH.					24 21 1 27 M	I.	1	
4 12 4 21 M	I.	1	25 22 9 26 A	I.	2			
5 19 4 9 M	I.	4	26 27 9 44 A	E.	4			
APRIL					27 28 3 20 M	I.	1	
6 2 3 41 M	I.	2	28 29 12 00	I.	2			
7 4 4 38 M	I.	1	JULY.					
8 5 3 3 M	E.	4	29 6 11 42 A	I.	1			
9 20 2 57 M	I.	1	30 7 2 36 M	I.	2			
10 25 1 51 M	E.	3	31 14 1 36 M	I.	1			
MAY.					32 15 8 4 A	I.	1	
11 2 2 16 M	I.	3	33 19 10 5 A	I.	3			
12 4 3 25 M	I.	2	34 21 3 31 M	I.	1			
13 6 1 14 M	I.	1	35 22 9 59 A	I.	1			
14 13 3 7 M	I.	1	36 24 12 00	E.	2			
15 29 0 26 M	I.	2	37 30 2 12 M	E.	1			
16 00 1 21 M	I.	1	38 31 8 41 A	E.	1			
JUNE.					AUGUST.			
17 5 3 00 M	I.	2	39 1 2 37 M	E.	2			
18 00 3 14 M	I.	1	40 6 4 8 M	E.	1			
			41 15 0 34 M	E.	1			
			42 16 11 37 A	I.	4			

AUGUST

D. H. M.						D. H. M.					
AUGUST.						OCTOBER.					
43	18	9	13	A	E. 2	63	14	6	24	A	E. 2
44	22	2	31	M	E. 1	64	15	11	39	A	E. 1
45	24	9	52	A	E. 3	65	21	9	1	A	E. 2
46	25	11	51	A	E. 2	66	24	8	4	A	E. 1
47	29	4	28	M	E. 1	67	31	9	58	A	E. 1
48	30	10	57	A	E. 1	NOVEMBER.					
SEPTEMBER.						68	8	7	5	A	E. 4
49	1	1	55	M	E. 3	69	11	6	18	A	E. 3
50	2	10	39	A	E. 4	70	16	6	7	A	E. 2
51	7	0	55	M	E. 1	71	16	8	14	A	E. 1
52	15	9	22	A	E. 1	72	18	6	44	A	E. 3
53	19	9	9	A	E. 2	73	22	8	41	A	E. 2
54	22	11	20	A	E. 1	74	25	5	49	A	E. 4
55	26	11	48	A	E. 2	DECEMBER.					
56	29	6	9	A	E. 3	75	2	6	27	A	E. 1
57	30	1	17	M	E. 1	76	9	8	19	A	E. 1
OCTOBER.						77	17	5	39	A	E. 2
58	1	7	46	A	E. 1	78	18	4	39	A	E. 1
59	6	6	38	A	E. 3	79	24	6	6	A	E. 3
60		10	12	A	E. 3	80	25	6	30	A	E. 1
61	8	9	43	A	E. 1	In all 80.					
62	13	10	40	A	E. 3						

The 2d and 5th Columns, shew the Times when the Eclipses will happen; the 3d and 6th, shew the Kind. Thus, on the 5th of *February*, at 6 h. 43 m. in the Morning there will happen an Immersion of the second Satellite; and the Number 1, which is placed against the 5th of *February* in the 1st Column, refers to the Number 1 in the 1st Column of the *Plate of Configurations*, against which is placed the *Correspondent Configuration*, or the Form in which the Satellites will appear at that Time.

*The Configurations of Jupiter's Satellites, at the times of Eclipses, as are Visible at London, will happen in the*  
*By James Hodgson F.R.S. Master of the Royal M*

1	$\star_4$  $\star_2$ $\star_1$ $\star_3$	41	$\star_1$
2	$\star_2$ $\star_1$  $\star_2$ $\star_4$	42	$\star_1$ $\star_4$
3	 $\star_1$ $\star_2$ $\star_3$ $\star_4$	43	$\star_4$ $\star_3$ $\star_1$ $\star_2$
4	$\star_2$  $\star_1$ $\star_4$ $\star_3$	44	$\star_4$ $\star_1$
5	$\star_2$  $\star_1$ $\star_4$ $\star_3$	45	$\star_4$ $\star_3$ $\star_1$
6	 $\star_2$ $\star_1$ $\star_3$ $\star_4$	46	$\star_3$ $\star_1$ $\star_2$
7	$\star_3$  $\star_2$ $\star_4$	47	$\star_1$
8	$\star_3$ $\star_1$  $\star_4$ $\star_2$	48	$\star_2$ $\star_1$
9	$\star_3$  $\star_1$ $\star_4$	49	$\star_3$
10	$\star_4$ $\star_2$  $\star_3$ $\star_1$	50	$\star_3$ $\star_2$ $\star_4$
11	$\star_2$  $\star_3$ $\star_1$ $\star_4$	51	$\star_4$ $\star_2$ $\star_1$
12	$\star_3$  $\star_2$ $\star_1$ $\star_4$	52	$\star_3$ $\star_1$
13	$\star_2$ $\star_3$  $\star_1$ $\star_4$	53	$\star_2$ $\star_1$ $\star_3$
14	$\star_4$ $\star_2$  $\star_1$	54	$\star_4$ $\star_3$ $\star_1$
15	$\star_4$  $\star_2$ $\star_3$	55	$\star_4$ $\star_1$ $\star_2$
16	$\star_4$  $\star_2$ $\star_3$	56	$\star_3$
17	 $\star_2$ $\star_3$ $\star_4$	57	$\star_3$ $\star_1$
18	 $\star_2$ $\star_3$ $\star_4$	58	$\star_3$ $\star_2$ $\star_1$
19	$\star_1$  $\star_3$ $\star_4$	59	$\star_4$ $\star_3$
20	$\star_1$  $\star_3$ $\star_4$ $\star_2$	60	$\star_4$ $\star_3$
21	$\star_1$  $\star_4$ $\star_3$ $\star_2$	61	$\star_4$ $\star_3$ $\star_2$ $\star_1$
22	$\star_4$ $\star_2$  $\star_1$ $\star_3$	62	$\star_4$ $\star_3$
23	$\star_4$ $\star_2$  $\star_3$	63	$\star_3$ $\star_1$ $\star_2$
24	$\star_2$  $\star_1$ $\star_3$ $\star_4$	64	$\star_3$ $\star_2$ $\star_1$
25	$\star_3$  $\star_2$ $\star_4$	65	$\star_3$ $\star_1$ $\star_2$
26	$\star_2$  $\star_4$ $\star_1$ $\star_3$	66	$\star_4$ $\star_1$
27	$\star_2$  $\star_1$ $\star_3$	67	$\star_1$
28	$\star_4$ $\star_3$  $\star_2$	68	$\star_4$ $\star_3$
29	$\star_3$  $\star_1$ $\star_2$ $\star_4$	69	$\star_4$ $\star_3$














*Philos. Transact. Vol. 43.*

*es when such of their*  
*the Year 1736.*  
*Mathematical School.*

$\frac{1}{1}$	$\odot$	$\ast 2$	$\frac{3}{\ast}$	$\frac{4}{\ast}$
$\frac{1}{\ast}$	$\frac{4}{\odot}$	$\ast$	$\ast 3$	
$\frac{\ast}{1}$	$\frac{\ast}{2} \odot$			
	$\frac{\ast}{1} \odot$	$\ast 2$	$\ast 3$	
$\frac{\ast \ast}{43}$	$\odot$	$\frac{1}{\ast}$	$\frac{2}{\ast}$	
$\frac{\ast}{1}$	$\frac{2}{\ast} \odot$	$\ast 4$		
	$\frac{\ast}{1} \odot$	$\frac{\ast}{2}$	$\frac{3}{\ast}$	$4 \ast$
$\frac{\ast}{2}$	$\frac{\ast}{1} \odot$		$\frac{3}{\ast}$	$\ast 4$
$\frac{3}{\ast}$	$\odot$	$\frac{1}{\ast}$	$\frac{2}{\ast}$	$\ast 4$
$\frac{\ast}{4}$	$\odot$	$\frac{1}{\ast}$		
$\frac{\ast}{2}$	$\frac{\ast}{1} \odot$		$\frac{3}{\ast}$	
	$\frac{\ast}{1} \odot$	$\ast 2$		$\frac{4}{\ast}$
$\frac{\ast}{1}$	$\frac{2}{\ast} \odot$		$\frac{3}{\ast}$	
	$\frac{\ast}{1} \odot$	$\ast$		
$\frac{\ast}{1}$	$\frac{\ast}{2} \odot$		$\frac{3}{\ast}$	
$\frac{\ast}{3}$	$\odot$	$\frac{1}{\ast}$	$\frac{2}{\ast}$	$\frac{4}{\ast}$
	$\frac{1}{\ast} \odot$	$\frac{2}{\ast}$		$\frac{4}{\ast}$
$\frac{\ast}{2}$	$\frac{\ast}{1} \odot$			$\frac{4}{\ast}$
	$\frac{\ast}{3} \odot$	$\frac{1}{\ast}$	$\frac{2}{\ast}$	
$\frac{\ast}{3}$	$\odot$	$\frac{1}{\ast}$	$\frac{2}{\ast}$	
	$\frac{\ast}{1} \odot$			
$\frac{\ast \ast}{43}$	$\odot$	$\frac{\ast}{1}$	$\frac{2}{\ast}$	
$\frac{\ast}{1}$	$\frac{\ast}{2} \odot$	$\frac{\ast}{4}$		
$\frac{\ast}{2}$	$\frac{\ast}{1} \odot$		$\ast 4$	
$\frac{\ast}{1}$	$\frac{\ast}{2} \odot$	$\ast 4$		
	$\frac{\ast}{1} \odot$	$3 \ast$	$\frac{2}{\ast}$	
$\frac{\ast}{1}$	$\odot$	$\ast 3$	$\frac{2}{\ast}$	$\ast 4$
$\frac{\ast \ast}{24}$	$\odot$		$\frac{3}{\ast}$	
$\frac{\ast}{1}$	$\odot$	$\frac{2}{\ast}$		

28	4* *3	☉ * 2	68		** 2 4
29	*3	☉ *1*2*4	69	*4	* 1 3
30	* 3	1 ☉ *2 *4	70		* 4    * 1 2 1
31	* 3	☉ * <sup>1</sup> * <sup>2</sup> *4	71		* 2    *
32	* 4	* 3    * 2    ☉ * <sup>1</sup>	72		* 1    *
33	* 4	* 1    ☉ * <sup>3</sup> * <sup>2</sup>	73		** 2 1
34	* 4    *	☉ * <sup>1</sup> * <sup>2</sup>	74		* 4    *
35		* 3    * 2    ☉ *	75		* 4    *
36		* 1    2    ☉	76		* 1
37		* 3    * 2    1    ☉	77	* 4	* 3    *
38		4*    * 1    ☉    * <sup>2</sup> *	78		* 4    * 3    2    *
39		4*    * 1    2    ☉	79		** 3 1
40	* 4	* 3    * 2    1    ☉	80		** <sup>3</sup> 2    *

*In these Forms will the Satellites appear, if they could be seen with a naked Eye, or through a Reflector, through a Telescope composed of two Convex Glasses, the Order will be inverted.*

$\begin{smallmatrix} * & * \\ 2 & 4 \end{smallmatrix}$			$\begin{smallmatrix} * \\ 4 \end{smallmatrix}$
$\begin{smallmatrix} * & * \\ 1 & 3 \end{smallmatrix}$		$\begin{smallmatrix} 2 \\ * \end{smallmatrix}$	
$\begin{smallmatrix} * & * & * \\ 1 & 2 & 1 \end{smallmatrix}$		$\begin{smallmatrix} 3 \\ * \end{smallmatrix}$	
$\begin{smallmatrix} 1 \\ * \end{smallmatrix}$			$\begin{smallmatrix} 3 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * \\ 1 \end{smallmatrix}$	$\begin{smallmatrix} * \\ 3 \end{smallmatrix}$		$\begin{smallmatrix} 2 \\ * \end{smallmatrix}$ $\begin{smallmatrix} * & 4 \end{smallmatrix}$
$\begin{smallmatrix} * & * \\ 2 & 1 \end{smallmatrix}$		$\begin{smallmatrix} 3 \\ * \end{smallmatrix}$	$\begin{smallmatrix} 4 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * \\ 4 \end{smallmatrix}$	$\begin{smallmatrix} * \\ 1 \end{smallmatrix}$		$\begin{smallmatrix} * & 3 \\ 2 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * \\ 1 \end{smallmatrix}$		$\begin{smallmatrix} * \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 2 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * \\ 1 \end{smallmatrix}$		$\begin{smallmatrix} * \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 2 \\ * \end{smallmatrix}$ $\begin{smallmatrix} 4 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * \\ 3 \end{smallmatrix}$	$\begin{smallmatrix} 2 \\ * \end{smallmatrix}$		
$\begin{smallmatrix} * \\ 1 \end{smallmatrix}$			
$\begin{smallmatrix} * & * & * \\ 3 & 1 \end{smallmatrix}$			$\begin{smallmatrix} 4 \\ * \end{smallmatrix}$
$\begin{smallmatrix} * & 3 \end{smallmatrix}$	$\begin{smallmatrix} 1 \\ * \end{smallmatrix}$		$\begin{smallmatrix} 4 \\ * \end{smallmatrix}$
<i>reflector; but if they are vien'd —</i>			

# The Configurations of Jupiter's Satellites, at the times when such of their Eclipses, as are visible at London, will happen in the Year 1736.

By James Hodgson F.R.S. Master of the Royal Mathematical School.

1		41	
2		42	
3		43	
4		44	
5		45	
6		46	
7		47	
8		48	
9		49	
10		50	
11		51	
12		52	
13		53	
14		54	
15		55	
16		56	
17		57	
18		58	
19		59	
20		60	
21		61	
22		62	
23		63	
24		64	
25		65	
26		66	
27		67	
28		68	
29		69	
30		70	
31		71	
32		72	
33		73	
34		74	
35		75	
36		76	
37		77	
38		78	
39		79	
40		80	

In these Forms will the Satellites appear, if they could be seen with a naked Eye, or through a Reflector; but if they are view'd through a Telescope compos'd of two Convex Glasses, the Order will be inverted.